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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/206,852	12/08/1998	RICHARD F. ALLISON	6550000028	6041

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EXAMINER

GRUNBERG, ANNE MARIE

ART UNIT PAPER NUMBER

1661

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/206,852

Applicant(s)

ALLISON ET AL.

Examiner

Anne Marie Grunberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 10 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-16 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-16 and 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The restriction requirement has been withdrawn. Claims 1, 3, 5-16, and 20-24 have been examined.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections***

1. Claims 1, 6, 9-10, 13-14, 16, and 20 remain rejected or are newly rejected under 35 U.S.C. 102(b) as being anticipated by Burchi et al.

Burchi et al teach a method for transforming a dicot plant (page 163, column 2, 2<sup>nd</sup> full paragraph, for example) wherein a meristematic tissue of the dicot plant is contacted with a medium comprising DNA and a negative lead of a power source and an area below the meristematic tissue is contacted with a positive lead of a power source (page 164, column 1, last paragraph, for example). A low amperage current from the power source causes the DNA to migrate from the medium to the cells of the meristematic tissue of the dicot plant (page 164, second column, first paragraph under "Results"; page 164, lines 1-3 under "Plant Material"; page 165, figure 1; page 165, column 2, lines 6-15; page 166, column 1, lines 1-26, for example). The DNA is a plasmid vector (page 164, column 1 under the heading "plasmids"). The current was about 0.01 to about 1.0 mA or about 0.1 to about 0.5 mA (page 164, second column, first paragraph under "Results"). The meristematic tissue was a meristematic dome and

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the area of the plant below the meristematic tissue is a root (page 164, column 1, last paragraph; page 164, bottom of the last paragraph in the first column). A transgenic plant was produced (page 164, lines 1-3 under "Plant material"; page 166, bottom of column 1; page 166, column 2, last paragraph). Claims 16 and 20 are product by process claims. Product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (see MPEP 2113). In this case, a transgenic plant produced by the process of claim 1 is indistinguishable from a transgenic plant produced by the process of claim 8.

Applicant argues that Burchi et al do not teach all the limitations of claim 1, namely a dicot plant. Applicant also argues that *Dewey & Almy Chem Co v Mimex Co* stated that if its (prior art) teaching sometimes succeed and sometimes fail, then it is not an anticipation.

The arguments have been carefully considered, however are not persuasive because Burchi et al. do teach the limitations of claim 1. Table 1 shows the results of three dicot species that have been transformed. Additionally, in biological systems there is rarely a 100% success rate. Even something as fundamental as germination is not 100%. Furthermore, all of the limitations of the claims have been taught by Burchi et al as discussed above. As a result, it is unclear how Applicant's invention as claimed is an improvement over the prior art. Burchi et al is fully enabled as described on page 164 under the "Materials and Methods" section.

Claims 3, 5, 7-8, 11-12, 15 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchi et al. in view of Bidney et al.

Burchi et al is discussed previously regarding dependent claim 1.

Burchi et al do not teach a soybean plant or a seedling. Nor do Burchi et al teach a linearized plasmid vector containing a gene for barley oxalic acid oxidase. Burchi et al also do not specifically teach an apical meristem, lateral meristem, or the stem below the meristematic tissue. Burchi et al also do not specifically teach a method of producing seed of a transformed plant. Burchi et al also do not teach a method for transforming a plant wherein an *Agrobacterium* plasmid vector containing a transgene is electrophoresed into a plant.

Bidnet et al teach a soybean plant (column 36, lines 25-50). Bidnet et al also teach a plasmid vector containing a gene for barley oxalic acid oxidase (column 36, lines 30-42; column 2, lines 61-65; for example). Bidnet et al also teach a method of producing seed of a transformed plant (column 36, lines 43-50; claims 1-4, for example). Although Bidnet et al do not specifically teach a linearized plasmid vector, they do teach at column 6, lines 35-45 that vectors typically contain a restriction endonuclease recognition site such that exogenous DNA sequences can be inserted. Once cleaved, the plasmid is linearized. Although Bidnet et al do not specifically teach a method wherein an *Agrobacterium* plasmid vector containing a transgene is electrophoresed into a host plant, they do teach a combination particle bombardment followed by the use of *Agrobacterium* for DNA delivery. One of ordinary skill in the art would have been motivated to substitute *Agrobacterium* binary vectors containing a transgene for the

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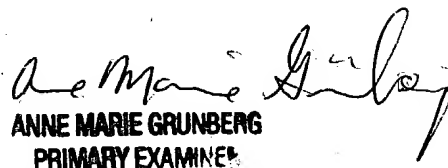
plasmid used by Burchi et al given that it is well known in the art that transformation of dicots is enhanced using *Agrobacterium* (column 14, lines 41-67; column 12, lines 24-50, for example). The location as to where the electrodes are placed varies with the size and age of the plant absent evidence to the contrary.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne Marie Grunberg whose telephone number is 571-272-0975. The examiner can normally be reached on Mon-Thur, 7:00 am to 4:30 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ANNE MARIE GRUNBERG  
PRIMARY EXAMINER